U.S. Army Soldier and Biological Chemical Command

Breeze Tunnel

The Breeze Tunnel is a testing facility located at the Edgewood Area of Aberdeen Proving Ground, MD. The facility consists of an environmentally contained tunnel, 14 ft x 14 ft in cross section and 196 ft in length. The exhaust end of the tunnel is attached to a filtration unit with a retention capability of 99.9% for particulate materials and 99.5% for droplet materials with aerodynamic diameters greater than 3 microns. The facility is instrumented to measure transmission reduction at .63 micron, 10.6 microns, 94 GHz and 35 GHz. Additional instrumentation can be brought in for specialized measurements if required by the customer.



The main functions of the facility are to determine transmission reduction and cloud characterization of obscuration materials, evaluate full size smoke generators and their components, and determine the impact on military hardware caused by obscuration materials present on the battlefield. The facility also has the capability of determining particle size distributions of solid particulate obscurants and dispersion characteristics of obscurant clouds. It has been successfully used as a wind tunnel with limited capabilities and as a testing chamber for projects in need of large operational space and protection from the environment. Data is collected and analyzed by computer using several statistical models.

Administratively, the facility is operated under the Integrated Product Team (IPT) concept that allows full customer participation in the planning and execution of their tests. IPT guidance and coordination are provided for the processing and approval of safety, environmental, hygiene, and transportation regulations in existence at Aberdeen Proving Ground's Edgewood Area site.

Let us work with you to evaluate your obscurant systems.

For additional information on this facility please E-mail research.technology@sbccom.apgea.army.mil .

For information on Technology Transfer applications, please contact us by E-mail (technical.outreach@sbccom.apgea.army.mil) or by fax to 410-436-6529.